

Abstract of the Disclosure

A method is described for producing phyllosilicate-intercalation compounds with an increased expansion volume and/or a modified onset temperature by intercalating intercalated compounds in native, expandable phyllosilicates, especially native vermiculite, which consists therein that the native phyllosilicate is subjected to ion exchange with at least one cationic surfactant and, at the same time or in a further step, at least one organic intercalation compound is intercalated in the phyllosilicate, with the proviso that the intercalation of dimethylformamide, chloroform, dimethylacetamide, toluene and dimethylsulfoxide can take place also without a prior ion exchange, the modified phyllosilicate-intercalation compounds obtained thereby and their use as intumescent material, which can be used as intumescent fire protection additive and/or, in expanded form, as additive for producing fire-retarding materials, as well as for producing high temperature-resistant insulation panels and seals, especially for the fire-retarding sealing of through holes, wall bushings and other openings in floors, walls and ceilings of buildings.